



# PUGET SOUND AIR POLLUTION CONTROL AGENCY

ENGINEERING DIVISION

110 Union Street, Suite 500 • Seattle, WA 98101-2038

Telephone: (206) 689-4052

## Notice of Construction and Application for Approval

**FORM P**  
SIDE 1

Be sure to complete items 39, 40, 41, & 43 before submitting Form P.

(AGENCY USE ONLY)

DATE \_\_\_\_\_ N/C NUMBER \_\_\_\_\_  
REG. NO. \_\_\_\_\_ VAR. NO. \_\_\_\_\_  
SIC. NO. \_\_\_\_\_ COS. NO. \_\_\_\_\_  
GRID NO. \_\_\_\_\_ UTM. \_\_\_\_\_

1. TYPE OF BUILDING (Check) <input type="checkbox"/> New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> New <input type="checkbox"/> Existing <input type="checkbox"/> Altered <input type="checkbox"/> Relocation	2. STATUS OF EQUIPMENT (Check) <input checked="" type="checkbox"/> New <input type="checkbox"/> Existing <input type="checkbox"/> Altered <input type="checkbox"/> Relocation	7. APPLICANT
3. COMPANY (OR OWNER) NAME Ash Grove Cement Company		8. APPLICANT ADDRESS
4. COMPANY (OR OWNER) MAILING ADDRESS 3801 East Marginal Way South Seattle, WA 98134		9. INSTALLATION ADDRESS same
5. NATURE OF BUSINESS Manufacturer of Portland Cement		10. TYPE OF PROCESS

EQUIPMENT (ENTER ONLY NEW EQUIPMENT OR CHANGES. ENTER NUMBER OF UNITS OF EQUIPMENT IN COLUMN 'NO. OF UNITS.' COMPLETE FORM 'S' FOR EACH ENTRY.)

11. NO. OF UNITS	SPACE HEATERS OR BOILERS (Complete Form S-A)	14. NO. OF UNITS	OVENS	15. NO. OF UNITS	MECHANICAL EQUIP.	16. NO. OF UNITS	MELTING FURNACES
(a) _____		(a) _____	CORE BAKING OVEN	(a) _____	AREAS	(a) _____	POT
12. NO. OF UNITS	INCINERATORS (Complete Form S-B)	(b) _____	PAINT BAKING	(b) 1	BULK CONVEYOR	(b) _____	REVERBERATORY
(b) _____		(c) _____	PLASTIC CURING	(c) _____	CLASSIFIER	(c) _____	ELECTRIC INDOUC/RESIST
(c) _____		(d) _____	LITHO COATING OVEN	(d) 1	STORAGE BIN	(d) _____	CRUCIBLE
13. NO. OF UNITS	OTHER SYSTEMS	(e) _____	DRYER	(e) _____	BAGGING	(e) _____	CUPOLA
(a) _____	DEGREASING, SOLVENT	(f) _____	ROASTER	(f) _____	OUTSIDE BULK STORAGE	(f) _____	ELECTRIC ARC
(b) _____	ABRASIVE BLASTING	(g) _____	KILN	(g) _____	LOADING OR UNLOADING	(g) _____	SWEAT
(c) _____	OTHER - SYSTEM	(h) _____	HEAT-TREATING	(h) _____	BATCHING	(h) _____	OTHER METALLIC
(d) _____		(i) _____	OTHER	(i) 1	MIXER (SOLIDS)	(i) _____	GLASS
		(j) _____		(j) _____	OTHER feeder	(j) _____	OTHER NON METALLIC
17. NO. OF UNITS	GENERAL OPER. EQUIP.	17. NO. OF UNITS	GENERAL OPER. EQUIP.	17. NO. OF UNITS	GENERAL OPER. EQUIP.	18. NO. OF UNITS	OTHER EQUIPMENT
(a) _____	CHEMICAL MILLING	(f) _____	GALVANIZING	(k) _____	ASPHALT BLOWING	(a) _____	SPRAY PAINTING GUN
(b) _____	PLATING	(g) _____	IMPREGNATING	(l) _____	CHEMICAL COATING	(b) _____	SPRAY BOOTH OR ROOM
(c) _____	DIGESTER	(h) _____	MIXING OR FORMULATING	(m) _____	COFFEE ROASTER	(c) _____	FLOW COATING
(d) _____	DRY CLEANING	(i) _____	REACTOR	(n) _____	SAWS & PLANERS	(d) _____	FIBERGLASSING
(e) _____	FORMING OR MOLDING	(j) _____	STILL	(o) _____	STORAGE TANK	(e) _____	OTHER

CONTROL DEVICES (ENTER NUMBER OF UNITS OF EQUIPMENT IN SPACES IN COLUMNS. COMPLETE A FORM R FOR EACH ENTRY.)

19. NO. OF UNITS	CONTROL DEVICE	20. NO. OF UNITS	CONTROL DEVICE	21. NO. OF UNITS	CONTROL DEVICE	22. NO. OF UNITS	CONTROL DEVICE
(a) _____	SPRAY CURTAIN	(a) _____	AIR WASHER	(a) _____	ABSORBER	(a) _____	DEMISTER
(b) _____	CYCLONE	(b) _____	WET COLLECTOR	(b) _____	ADSORBER	(b) _____	BAGHOUSE
(c) _____	MULTIPLE CYCLONE	(c) _____	VENTURI SCRUBBER	(c) _____	FILTER PADS	(c) _____	ELEC. PRECIPITATOR
(d) _____	INERTIAL COLL. - OTHER	(d) _____		(d) _____	AFTERBURNER	(d) _____	OTHER

23. BASIC EQUIPMENT COST (Estimate) \$100,000.00	24. CONTROL EQUIPMENT COST (Estimate) \$3,500.00	25. DAILY HOURS FROM 12:00 AM to 11:59 PM	26. DAYS OF OPERATION (Circle) S M T W T F S
27. ESTIMATED STARTING DATE OF CONSTRUCTION: February 21, 1994		28. ESTIMATED COMPLETION DATE OF CONSTRUCTION: March 31, 1994	

29. RAW MATERIALS (List starting material used in process) AND FUELS (Type and amount)	ANNUAL AMT. UNITS	30. PRODUCTS (List End Products)	ANNUAL PROD. UNITS
(a) fly ash	35,000 ton	(a) _____	_____
(b) _____	_____	(b) _____	_____
(c) _____	_____	(c) _____	_____
(d) _____	_____	(d) _____	_____
(e) _____	_____	(e) _____	_____
(f) _____	_____	(f) _____	_____
(g) _____	_____	(g) _____	_____

AGCS2M002315

SEA0718

# Notice of Construction Application | FORM P

STACKS OR VENTS (LIST NUMBER, TYPE, AND SIZE OF VENT)

31. NO. OF UNITS	DESCRIPTION OF OPENING	32. HEIGHT ABOVE GRADE (FT.)	33. VOLUME EXHAUSTED (ACFM)	DIMENSIONS (INCHES)	
				34. LENGTH (OR DIAM)	35. WIDTH
(a)	STACKS				
(b)	FLUES				
(c)	PROCESS OR GENERAL EXHAUST	72'	750 CFM	6"	6"
(d)	PROCESS OR GENERAL VENTS				
(e)	SKYLIGHT OR WINDOW				
(f)	EXHAUST HOOD				
(g)	OTHER				

## FLOW DIAGRAM

### 36. FLOW DIAGRAM INSTRUCTIONS:

- (a) FLOW DIAGRAM MAY BE SCHEMATIC. ALL EQUIPMENT SHOULD BE SHOWN WITH EXISTING EQUIPMENT SO INDICATED.
- (b) SHOW FLOW DIAGRAM OF PROCESS STARTING WITH RAW MATERIALS USED AND ENDING WITH FINISHED PRODUCT.
- (c) IF MORE THAN ONE PROCESS IS INVOLVED TO MAKE FINISHED PRODUCT, SHOW EACH PROCESS AND WHERE THEY MERGE.
- (d) INDICATE ALL POINTS IN PROCESS WHERE GASEOUS OR PARTICULATE POLLUTANTS ARE EMITTED.
- (e) FLOW CHART CAN BE ATTACHED SEPARATELY IF NECESSARY. (DRAWINGS MAY BE SUBMITTED INSTEAD IF DESIRED).
- (f) SHOW PICKUP AND DISCHARGE POINTS FOR HANDLING OR CONVEYING EQUIPMENT.

see attached

### 37. LIST OF ATTACHMENTS AND ACCOMPANYING DATA OR COMMENTS:

Form R	Equipment Schedule	PLOT PLAN
Form S	Flow Sheet	
Environmental Checklist	General Arrangement	
Narrative Description	Dust Collector Drawing	

### 38. CERTIFICATION:

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THIS APPLICATION AND THE ACCOMPANYING FORMS, PLANS, AND SUPPLEMENTAL DATA DESCRIBED HEREIN IS, TO THE BEST OF MY KNOWLEDGE, ACCURATE AND COMPLETE.

### 39. SIGNATURE

41. TYPE OR PRINT NAME  
Ralph C. Jones

42. TITLE  
Plant Engineer

40. DATE  
2/10/94

43. PHONE  
(206) 623-5596



**PUGET SOUND AIR POLLUTION CONTROL AGENCY**  
 Engineering Division ■ 110 Union Street, Suite 500 ■ Seattle, Washington 98101-2038 ■ (206) 689-4052  
**NOTICE of CONSTRUCTION & APPLICATION for APPROVAL**

FOR BASIC PROCESS EQUIPMENT

**FORM S**

For Agency Use

Date: \_\_\_\_\_ N/C# \_\_\_\_\_

\*Note: Information required by Section 1a must be completed for this form to be accepted for review.

1	a. Complete the Sections Indicated* <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input checked="" type="checkbox"/> 5 <input checked="" type="checkbox"/> 6 <input checked="" type="checkbox"/> 7 <input checked="" type="checkbox"/> 8 <input checked="" type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12		b. Company (or owner) Installation Address 3801 East Marginal Way South Seattle, WA 98134	
	c. Company (or owner) Name Ash Grove Cement Company		d. Applicant	
	e. Prepared by (name and title) Ralph C. Jones, P.E., Plant Engineer		f. Prepared by (signature) _____ g. Phone (206) 623-5596	
2	a. PROCESS EQUIPMENT	b. Title fly ash storage silo	c. Make & Model	d. Dimensions (LxWxH) 14'0 X 64'
	e. # of Units; Rated Capacity 150 tons	f.	g. Auxiliary Equipment	h. Connected to:
3	a.	b.	c.	d.
	e.	f.	g. Equipment	h. Connected to:
4	a. BURNERS	b. Type of Burner, Fuel	c. Make & Model	d. Rated Capacity
	e. # of Units; Ignition Method	f.	g. CFM Exhausted (Temperature) ____ (____ °F)	h. Connected to:
5	a. STACKS, VENTS, AND EXHAUST OPENINGS	b. Type of Vent bag house	c. Dimensions 33" x 33"	d.
	e. # of Vents; Material of Construction (1)	f.	g. CFM Exhausted (Temperature) 750 (100 °F)	h. Connected to: storage silo
6	a. TANKS AND KETTLES	b. Type of Tank, Material	c. Dimensions (LxWxH) in inches	d. Surface Area (sq. ft.) [ ] Closed [ ] Open
	e. # of Tanks; Material of Construction	f.	g. Auxiliary Equipment	h. Connected to:
7	a. FANS	b. Type of Fan (designate blade) paddle wheel	c. Make & Model day	d. Motor Data 1800 RPM 1 HP
	e. # of Fans; Material of Construction	f.	g. CFM Exhausted (Temperature) 750 (100 °F)	h. Connected to: baghouse
8	a. OVENS & FURNACES	b. Type of Oven or Furnace	c. Make & Model	d. Rated Capacity
	e. # of Ovens or Furnaces; Material of Construction	f.	g. CFM Exhausted (Temperature) ____ (____ °F)	h. Connected to:
9	a. OPERATIONAL DATA	b. Type of Operation [ ] Batch <input checked="" type="checkbox"/> Continuous	c. Operating Schedule (normal) Shifts/Day: <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3	d. Mode of Operations [ ] Manual <input checked="" type="checkbox"/> Auto [ ] Semi-Auto
	e. Duration of Batch (hrs/batch)	f.	g. Daily # of Batches ____ avg ____ max	h. 192 TPD max cap 96 TPD expected
10	a. CONVEYORS	b. Type of Conveyor (pneumatic, belt) pneumatic	c. Make & Model 3"0 screw pump	d. Capacity 8 TPH
	e. Dimensions (LxWxH)	f.	g. # of Pickups # of Discharge Points 1 1	h. Connected to: raw grinding mill
11	a. GAS FLOW	b. Actual CFM	c. SCFM (Reg I Standard)	d. Temperature (°F) In ____ Out ____
	e. Pressure Drop	f. Efficiency	g. Inlet and Outlet Pollutant Concentrations	h.
12	a. ADDITIONAL DATA	b. [ ] Attach Brochure	c. [ ] Attach Plans/Specs	d. [ ] Attach Emission Estimate (show calculation)
	e. <input checked="" type="checkbox"/> Submit Narrative Description of Process	f. [ ] Submit Source Test Data	g. [ ] Submit Modeling Data	h. [ ] Attach Schedule of Equipment with Make, Model, Capacity
	i. [ ]	j. [ ]	k. [ ]	l. [ ]

<b>PUGET SOUND AIR POLLUTION CONTROL AGENCY</b> Engineering Division ■ 110 Union Street, Room 500 ■ Seattle, Washington 98101-2038 ■ (206) 689-4052			
<b>NOTICE of CONSTRUCTION &amp; APPLICATION for APPROVAL</b>			
<b>FOR AIR POLLUTION CONTROL EQUIPMENT ONLY</b>		<b>FORM R</b>	For Agency Use: Date: _____ N/C# _____

\*Note: Information required by Section 1a must be completed for this form to be accepted for review.

1	a. Complete the Sections Indicated* <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 6 <input checked="" type="checkbox"/> 7 <input checked="" type="checkbox"/> 8 <input type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12	b. Company (or owner) Installation Address 3801 East Marginal Way South Seattle, WA 98134	
	c. Company (or owner) Name Ash Grove Cement Company	d. Applicant	
	e. Prepared by (name and title) Ralph C. Jones, P. E., Plant Engineer	f. Prepared by (signature)	g. Phone (206) 623-5596
2	a. <b>AIR POLLUTION CONTROL EQUIPMENT</b>	b. Type of Equipment	c. Make & Model
	d. Dimensions (LxWxH)	e. Number of Units	f. Capacity
3	a. <b>BAGHOUSE</b>	b. Number of Bags 16	c. Shaking Cycle (auto or manual tapping or reverse air) pulse @ 30 second intervals
	d. Cloth Area 159 sq. ft.	e. Material Used polyester	f. used to dedust storage bin
4	a. <b>ELECTROSTATIC PRECIP.</b>	b. Electrode Separation (ft)	c. Coll. Electrode Dimensions LxW (ft)
	d. Mean Velocity of Gas (ft/sec)	e. Area (sq ft)	f. Voltage
5	a. <b>BURNERS</b>	b. Type of Burner, Fuel	c. Make & Model
	d. Rating	e. Number of Units; Ignition	f.
6	a. <b>STACKS, VENTS</b>	b. Type of Vent	c. Dimensions (LxWxH)
	d. Dampers	e. No. of Vents; Material Used	f.
7	a. <b>SCRUBBERS</b>	b. Type of Flow (spray, bubbler)	c. Packing Type/Size
	d. Pressure Drop (inches of water)	e. Composition of Solution	f.
8	a. <b>FANS</b>	b. Type of Fan (designate blade) paddle wheel	c. Make & Model day
	d. Motor Data 1800 RPM 1 HP	e. Number of Fans; Material Used (1) mild steel	f. mounted on baghouse
9	a. <b>CYCLONES</b>	b. Type of Cyclone <input type="checkbox"/> Common <input type="checkbox"/> Split Duct <input type="checkbox"/> Multiclone	c. Make & Model
	d. Inlet Area (sq ft)	e. Number of Units; Material Used	f. Body Dia. (in.) Outlet Dia. (in.)
10	a. <b>COLLECTION DATA</b>	b. Description of Collected Matl. coal fly ash	c. Amount Collected (lbs/day) 0.4 lb/day
	d. Particle Size (microns avg.) 37 micron	e. Types of Pollutants <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Particulate <input type="checkbox"/> Odor	f. fan will run 3 hours or less per day
11	a. <b>GAS FLOW</b>	b. Actual CFM	c. SCFM (Reg I Standard)
	d. Temperature (°F) In _____ Out _____	e. Pressure Drop	f. Efficiency
12	a. <b>ADDITIONAL DATA</b>	b. <input checked="" type="checkbox"/> Attach Brochure (if any?)	c. <input checked="" type="checkbox"/> Attach Plans/Specs
	d. <input checked="" type="checkbox"/> Attach Emission Estimate (show calculation)	e. <input checked="" type="checkbox"/> Submit Narrative Description of Process	f. <input checked="" type="checkbox"/> Submit Source Test Data
	g. <input type="checkbox"/> Submit Modeling Data	h. <input type="checkbox"/> Attach Schedule of Equipment with Make, Model, Capacity	i. <input type="checkbox"/>



# ASH GROVE CEMENT COMPANY

PROJECT: FLY ASH BIN JOB NO: DATE: 2/10/94 BY: R. JONES PAGE 1 OF 1

## FLY ASH BIN EQUIPMENT SCHEDULE

1. BIN VENT DUST COLLECTOR, DAY 16PJDC W/ FAN
2. BLOWER, MD PNEUMATICS 4012-4723
3. BLOWER, MD PNEUMATICS 3206-4723
4. SCREW FEEDER, MARTIN 6"  $\phi$  x 8'-0" LG
5. FLY ASH PUMP, 3"  $\phi$  SCREW TYPE PNEUMATIC
6. BIN, 150 TON

## NARRATIVE DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROVIDE A MEANS OF INTRODUCING FLY ASH AS A RAW MATERIAL INTO THE CEMENT KILN RAW FEED. A 150 TON STORAGE BIN WILL BE PLACED ALONGSIDE THE EXISTING CLINKER STORAGE SILOS. FLY ASH WILL BE RECEIVED BY PNEUMATIC TANKER TRUCKS INTO THE 150 TON BIN. FLY ASH WILL BE METERED FROM THE TANK BY A DUST TIGHT SCREW FEEDER INTO A PNEUMATIC CONVEYING SYSTEM. THE PNEUMATIC CONVEY LINE WILL DELIVER THE FLY ASH INTO THE EXISTING RAW GRINDING MILL. DEDUSTING OF THE STORAGE BIN IS BY A 750 CFM FABRIC FILTER BIN VENT. DEDUSTING AT THE MILL IS BY THE EXISTING MAIN BAGHOUSE.

## CALCULATION OF DUST LOAD

$$750 \text{ CFM} \left( .02 \frac{\text{GRAINS}}{\text{CFM}} \right) \left( \frac{1 \text{ LBS}}{7000 \text{ GRAINS}} \right) \left( \frac{60 \text{ MIN}}{\text{HR}} \right) \left( \frac{3 \text{ HR}}{\text{DAY}} \right) = 0.4 \text{ LB/DAY}$$

PUGET SOUND AIR POLLUTION CONTROL AGENCY  
110 Union Street, Suite 500  
Seattle, Washington 98101  
ENVIRONMENTAL CHECKLIST

WAIT - You may not need to fill out the attached checklist.  
Please read and check the following:

Because of the State Environmental Policy Act, the action for which you are filing a Notice of Construction and Application for Approval to this Agency requires the completion of an environmental checklist.

BUT: If you can answer "yes" to either of the following questions with respect to the action being proposed, the attached checklist need not be completed:

1. I have obtained a State, City or County Permit and filled out an environmental checklist.

☐

Yes

☒

No

If you answered "yes", give State, City or County Department and date, and attach a copy of the checklist.

2. An environmental checklist or assessment has previously been filled out for another agency.

☐

Yes

☒

No

If "yes", give agency and date, and attach a copy of the checklist.

If your answer to both of the above questions was "no", you must fill out the attached environmental checklist.

Prepared by:

  
(Signature)

Ralph C. Jones  
(Print Name)

Plant Engineer  
(Title)





Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic areas," respectively.

TO BE COMPLETED BY THE APPLICANT

**A. BACKGROUND**

1. Name of proposed project, if applicable:

Fly Ash Bin and Feeder

2. Name of applicant: Ash Grove Cement Company

3. Address and phone number of applicant and contact person:

Name: Ralph C. Jones, P.E. Title: Plant Engineer

Firm: Ash Grove Cement Co. Telephone: (206) 623-5596

PO Box/Street: 3801 East Marginal Way South

City/State/Zip: Seattle, WA 98134

4. Date checklist prepared: February 9, 1994

5. Agency requesting checklist: PSAPCA

6. Proposed timing or schedule (including phasing, if applicable):

installation is planned for early March

start-up is anticipated in mid-March

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

no



# Puget Sound Air Pollution Control Agency

110 Union Street, Suite 500  
Seattle, Washington 98101  
Telephone: (206) 343-8800  
1-800-552-3635

Date: 2-10-94

Proponent: Ash Grove Cement Company

Project, Brief Title: Fly Ash Bin and Feeder

## ENVIRONMENTAL CHECKLIST

### Purpose of Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

### Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

#### Serving:

King County  
Elk County  
Pierce County  
Shelton County

Anne J. Frankel, Air Pollution Control Officer

#### BOARD OF DIRECTORS

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Joe Scortini, Pierce County Executive  
Karen Wallis, Mayor Tacoma

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The environmental checklist prepared in December 1988 for construction of the plant is directly related to this proposal.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

no

10. List any government approvals or permits that will be needed for your proposal, if known.

none

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

The purpose of this project is to provide a means of introducing Fly Ash as a raw material into the cement kiln feed. A 150 ton storage bin will be placed along side the existing clinker storage silos. Fly Ash will be delivered by pneumatic tanker trucks. Fly Ash will be metered from the tank by a dust tight screw feeder into a pneumatic conveying system. The pneumatic conveyor will deliver fly ash into the raw grinding mill through a 3½" diameter pipeline. Dedusting of the bin will be by a 750 CFM fabric filter bin vent and fan. Dedusting at the mill will be by the main plant baghouse.



12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The location is at the Ash Grove Cement Plant located at  
3801 East Marginal Way South; Seattle, WA 98134; adjacent  
to the existing clinker storage silos.

## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

- a. General description of the site (circle one) Flat, rolling, hilly, steep slopes, mountainous, other: \_\_\_\_\_
- b. What is the steepest slope on the site (approximate percent slope)?  
two percent
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)?  
If you know the classification of agricultural soils, specify them and note any prime farmland.  
Hydraulic dredge fill overlying alluvial sands and silts with  
glacially consolidated sandy silt at considerable depths, about  
200 feet below the existing ground surface elevation.
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.  
no
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed.  
Indicate source of fill.  
none
- f. Could erosion occur as a result of clearing, construction or use? If so, generally describe.  
no
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?  
Approximately 40 percent is presently impervious. This will remain unchanged as the equipment will be located on existing concrete footings.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:  
None required as there will be no excavation.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, Industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.  
During construction, minor fugitive dust may be generated due to construction activity.  
During operation dust will be emitted from the process, but will be controlled below permitted amounts by the fabric filter dust collectors.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

no

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:  
The process is vented by fabric filter dust collectors.

3. Water

a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Duwamish River flows along the west border of the plant site.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

no

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

none



- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

no

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

no

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

no

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose and approximate quantities if known.

no

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the systems, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

none

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water runoff will continue to be collected in the existing plant storm water system.

2) Could waste material enter ground or surface waters? If so, generally describe.

no

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

none

#### 4. Plants

a. Check or circle types of vegetation found on the site:

☒ deciduous tree: alder, maple, aspen, other

☒ evergreen tree: fir, cedar, pine, other

☒ shrubs

☒ grass

☐ pasture

☐ crop or grain

☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

☐ water plants: water lily, eelgrass, milfoil, other

☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

none

c. List threatened or endangered species known to be on or near the site.

none

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

none

#### 5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

none

Birds: hawk, heron, eagle, songbirds, other:

Mammals: deer, bear, elk, beaver, other:

---

Fish: bass, salmon, trout, herring, shellfish, other:

---

- b. List any threatened or endangered species known to be on or near the site.

none

- c. Is the site part of a migration route? If so, explain.

no

- d. Proposed measures to preserve or enhance wildlife, if any:

none

## 6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity will be used to power dust collection and conveying equipment.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

no

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

none



7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Exposure to fugitive dust.

- 1) Describe special emergency services that might be required.

none

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Fugitive dust will be controlled by means of fabric filter dust collectors.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Various pieces of heavy machinery are located at the plant site.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

A fan and two blowers will be added.

- 3) Proposed measures to reduce or control noise impacts, if any:

The blowers will be equipped with silencers.

8. Land and Shoreline use

- a. What is the current use of the site and adjacent properties?

heavy manufacturing

- b. Has the site been used for agriculture? If so, describe.

no

- c. Describe any structures on the site.

At the site are a 14 foot diameter cement kiln, 260 foot tall preheater tower, raw material silos, clinker storage silos and shed, cement storage silos, raw mill building, finish mill building, packhouse building, motor control centers, plant office and sales office.

- d. Will any structures be demolished? If so, what?

no

- e. What is the current zoning classification of the site?

General Industrial 1 (IG 1)

- f. What is the current comprehensive plan designation of the site?

Industrial

- g. If applicable, what is the current shoreline master program designation of the site?

Urban Industrial (UI)

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

no

i. Approximately how many people would reside or work in the completed project?

none

j. Approximately how many people would the completed project displace?

none

k. Proposed measures to avoid or reduce displacement impacts, if any:

not applicable

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

not applicable

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

not applicable

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

not applicable



- c. Proposed measures to reduce or control housing impacts, if any:  
not applicable

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?  
67 feet, painted steel plate
- b. What views in the immediate vicinity would be altered or obstructed?  
none
- c. Proposed measures to reduce or control aesthetic impacts, if any:  
not applicable

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?  
none
- b. Could light or glare from the finished project be a safety hazard or interfere with views?  
no
- c. What existing off-site sources of light or glare may affect your proposal?  
none

- d. Proposed measures to reduce or control light and glare impacts, if any:

none

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

none

- b. Would the proposed project displace any existing recreational uses? If so, describe.

no

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

not applicable

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

no

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

does not apply

- c. Proposed measures to reduce or control impacts, if any:  
does not apply

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

East Marginal Way serves the site. Access is by way of an existing driveway entrance at the northeast corner of the property.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. The closest transit stop is 1000 feet away.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

Will not change from current levels.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None. The increase in tanker truck traffic will be matched by a decrease in clay truck traffic.



g. Proposed measures to reduce or control transportation impacts, if any:

none

15. Public Services

a. Would the project result in an increased need for public services (for example, fire protection, police protection, health care, schools, other)? If so, generally describe.

no

b. Proposed measures to reduce or control direct impacts on public services, if any.

not applicable

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and service, and the general construction activities on the site or in the immediate vicinity which might be needed.

none

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: \_\_\_\_\_

Date Submitted: February 10, 1994

#### D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substance; or production of noise?

Small amounts of fugitive dust will be emitted from the baghouse. A new fan and two blowers will generate some additional noise.

Proposed measures to avoid or reduce such increase are:

A fabric filter baghouse with a conservative (4:1) air to cloth ratio will be installed. The blowers will be equipped with silencers.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The proposal will have negligible impact.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

not applicable

3. How would the proposal be likely to deplete energy or natural resources?

The proposal will result in a negligible increase in energy consumption of the plant.

Proposed measures to protect or conserve energy and natural resources are:

The benefit of this project is that it will use fly ash in the manufacture of Portland Cement. The fly ash is currently being placed in a landfill.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

does not apply

Proposed measures to protect such resources or to avoid or reduce impacts are:

does not apply

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

does not apply

Proposed measures to avoid or reduce shoreline and land use impacts are:

does not apply

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

It will not increase demand in transportation or services.

Proposed measures to reduce or respond to such demand(s) are:

none

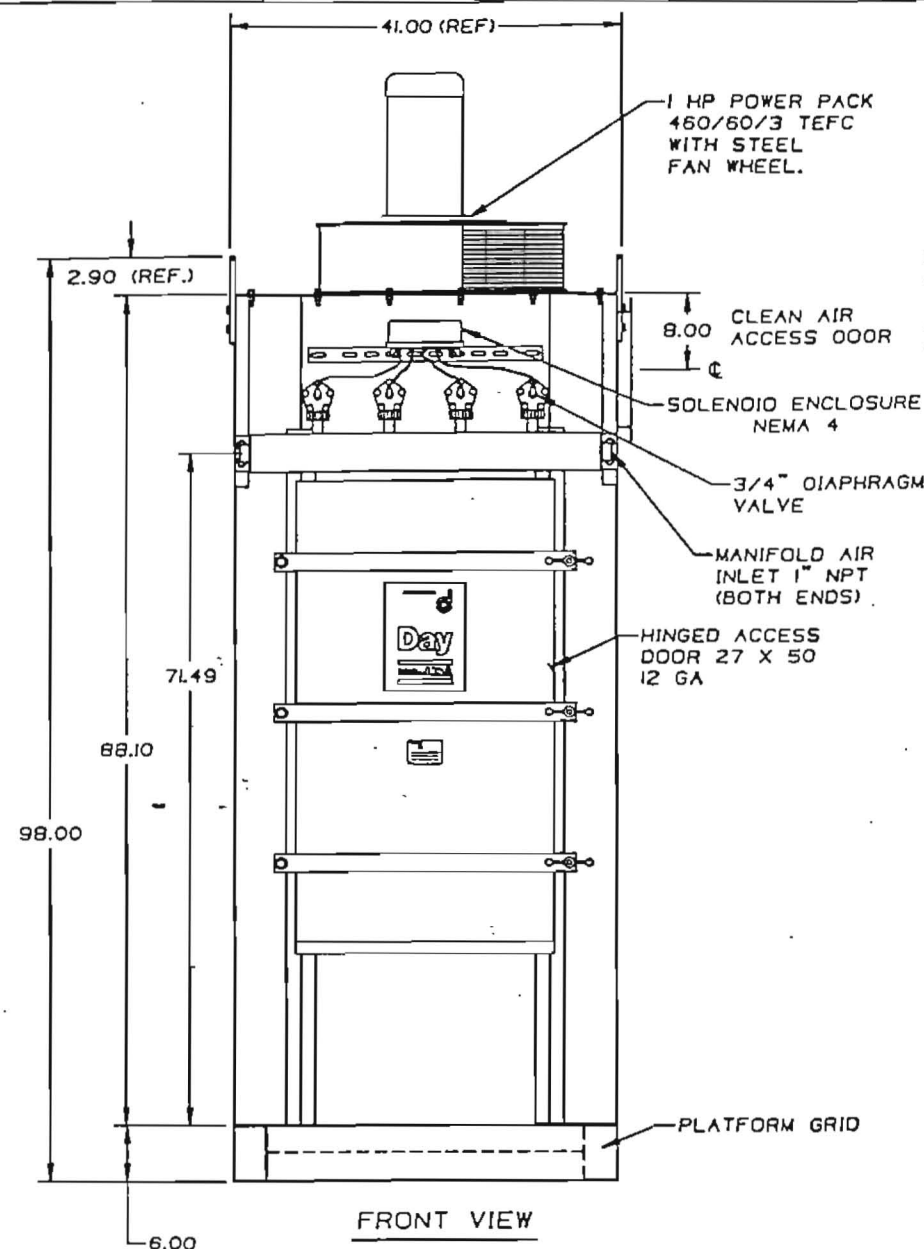
7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

does not apply

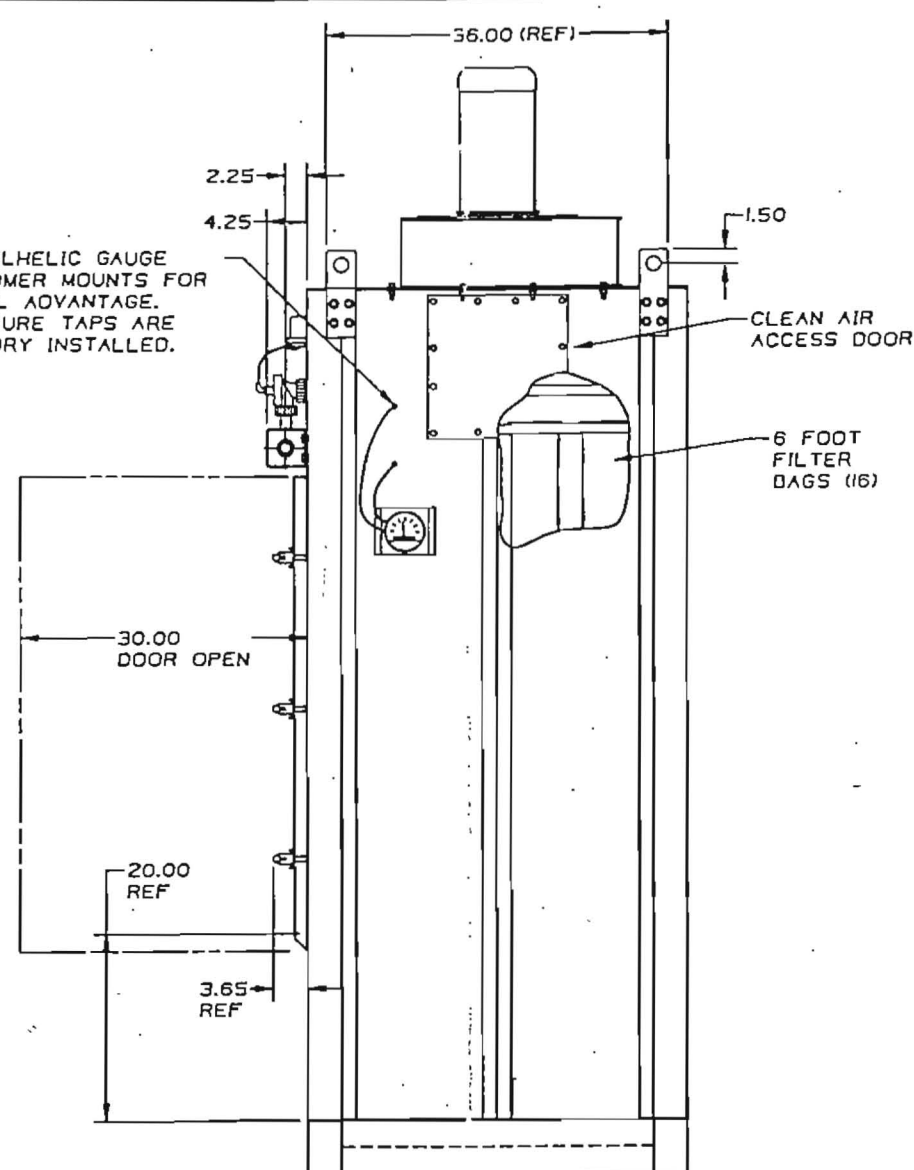




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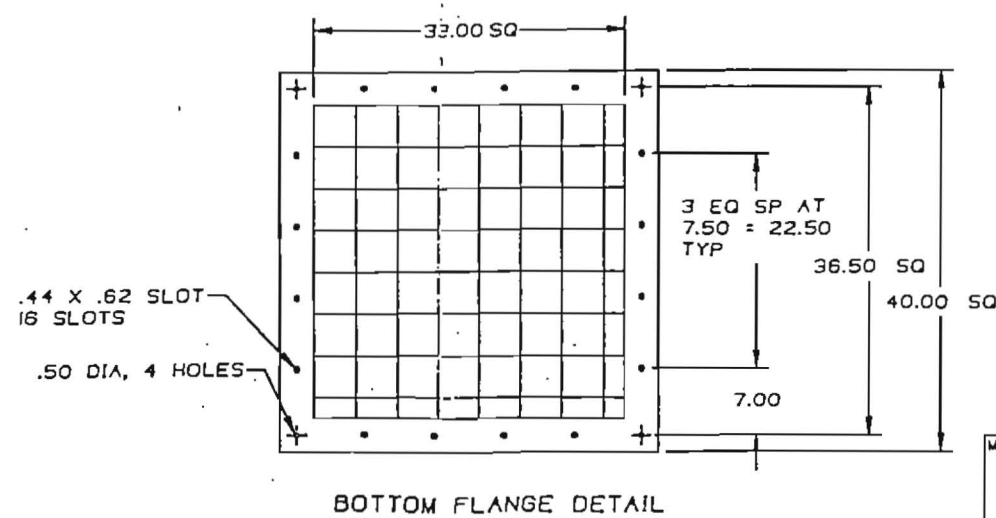


MAGNETIC GAUGE  
CUSTOMER MOUNTS FOR  
VISUAL ADVANTAGE.  
PRESSURE TAPS ARE  
FACTORY INSTALLED.



### SPECIFICATIONS FOR MODEL 16PJ06 BIN VENT


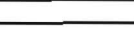
NO. OF FILTER BAGS	16
FILTER BAG DIMENSIONS	4.7 DIA X 72" LG
ACTUAL FILTER AREA	159 SQ FT
STANDARD FILTER MATERIAL	POLYESTER FELT UNTREATED 16 OZ
NO. OF VALVES	4
WIND LOAD RATING	100 MPH
HOUSING RATING	±20" H <sub>2</sub> O
SEISMIC RATING	ZONE 3
ROOF LOADS	30 LBS PER SQ FT SNOWLOAD + 600 LBS EQUIPMENT
COMPRESSED AIR REQUIRED	90-100 PSIG
AIR CONSUMPTION	1.11 SCF / PULSE
REMOTE MOUNTED TIMER	120 VAC 50-60 HZ (NEMA 4)
STANDARD FINISH	FEDERAL BLUE W/PRIMED INTERIOR
SHIPPING WT (APPROX)	1450 LBS



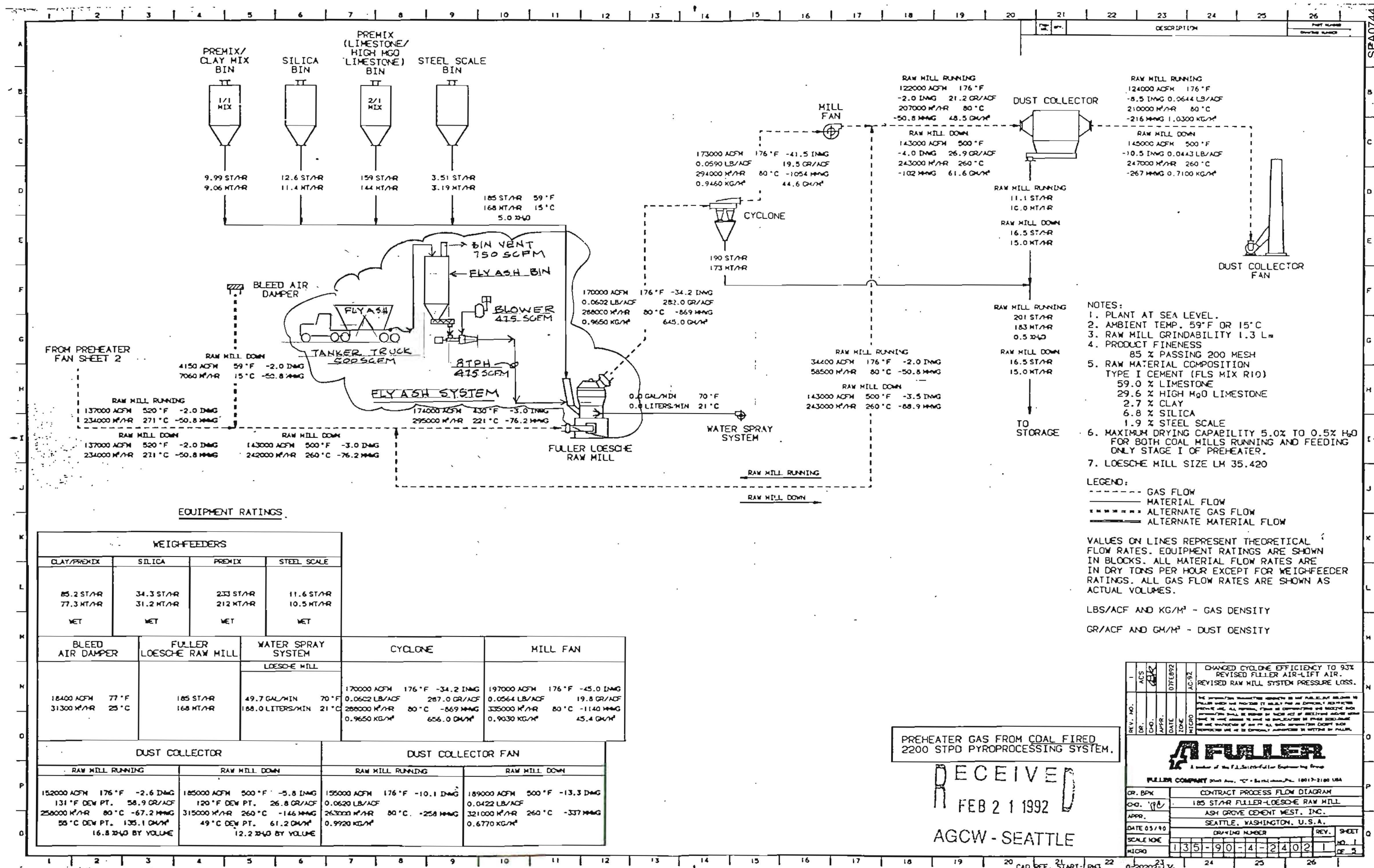
#### NOTE

- UNIT IS CONSTRUCTED OF 12 GA MILD STEEL.

BAXTER AIR ENGINEERING

MATERIAL		RELEASE NO.		TITLE 16PJ06 PULSE JET DUST COLLECTOR BIN VENT STYLE			
		DATE					
		EXP DATE					
REFERENCE		DWN V. REED		NUMBER			1G-091797
		DATE MAY 17, 1993		CHK			
		DATE		SCALE NONE			
PREVIOUS DRAWING NO.		APVO		SHEET NO OF 1			REVISION
		DATE		C/C			
		APVO		CADD			
DO NOT SCALE		DATE		SECTIONAL SIZE X			OUTLINE SIZE
		THIRD ANGLE PROJECTION		NO			
		TOLERANCES UNLESS OTHERWISE SPECIFIED		DESIGN CONTROL 51			
2 PL & 3 PL & AND RS.				DWG LOCATION 62			VERSION
				AS FURNISHED			
				ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED			

AGCS2M002340



FROM PREHEATER FAN SHEET 2

**EQUIPMENT RATINGS**

WEIGHFEEDERS			
CLAY/PREMIX	SILICA	PREMIX	STEEL SCALE
85.2 ST/HR 77.3 MT/HR MET	34.3 ST/HR 31.2 MT/HR MET	233 ST/HR 212 MT/HR MET	11.6 ST/HR 10.5 MT/HR MET
BLEED AIR DAMPER		FULLER LOESCHE RAW MILL	WATER SPRAY SYSTEM
18400 ACFM 77°F 31300 M³/HR 25°C		185 ST/HR 168 MT/HR	49.7 GAL/MIN 70°F 188.0 LITERS/MIN 21°C
DUST COLLECTOR		DUST COLLECTOR FAN	
RAW MILL RUNNING	RAW MILL DOWN	RAW MILL RUNNING	RAW MILL DOWN
152000 ACFM 176°F -2.6 INMG 131°F DEW PT. 58.9 GR/ACF 258000 M³/HR 80°C -67.2 MMWG 55°C DEW PT. 135.1 GM/M³ 16.8 X40 BY VOLUME	185000 ACFM 500°F -5.8 INMG 120°F DEW PT. 26.8 GR/ACF 315000 M³/HR 260°C -146 MMWG 49°C DEW PT. 61.2 GM/M³ 12.2 X40 BY VOLUME	155000 ACFM 176°F -10.1 INMG 0.0620 LB/ACF 263000 M³/HR 80°C -258 MMWG 0.9920 KG/M³	189000 ACFM 500°F -13.3 INMG 0.0422 LB/ACF 321000 M³/HR 260°C -337 MMWG 0.6770 KG/M³

- NOTES:**
1. PLANT AT SEA LEVEL.
  2. AMBIENT TEMP. 59°F OR 15°C
  3. RAW MILL GRINDABILITY 1.3 L<sub>w</sub>
  4. PRODUCT FINENESS 85% PASSING 200 MESH
  5. RAW MATERIAL COMPOSITION  
TYPE I CEMENT (FLS MIX R10)  
59.0% LIMESTONE  
29.6% HIGH M<sub>90</sub> LIMESTONE  
2.7% CLAY  
6.8% SILICA  
1.9% STEEL SCALE
  6. MAXIMUM DRYING CAPABILITY 5.0% TO 0.5% H<sub>2</sub>O FOR BOTH COAL MILLS RUNNING AND FEEDING ONLY STAGE I OF PREHEATER.
  7. LOESCHE MILL SIZE LM 35.420

- LEGEND:**
- GAS FLOW
  - MATERIAL FLOW
  - ALTERNATE GAS FLOW
  - ALTERNATE MATERIAL FLOW

VALUES ON LINES REPRESENT THEORETICAL FLOW RATES. EQUIPMENT RATINGS ARE SHOWN IN BLOCKS. ALL MATERIAL FLOW RATES ARE IN DRY TONS PER HOUR EXCEPT FOR WEIGHFEEDER RATINGS. ALL GAS FLOW RATES ARE SHOWN AS ACTUAL VOLUMES.

LBS/ACF AND KG/M³ - GAS DENSITY  
GR/ACF AND GM/M³ - DUST DENSITY

CHANGED CYCLONE EFFICIENCY TO 93%  
REVISED FULLER AIR-LIFT AIR.  
REVISED RAW MILL SYSTEM PRESSURE LOSS.

**FULLER**  
A member of the F.L. Smith-Fuller Engineering Group

FULLER COMPANY 2000 Ave. "C" - Seattle, Wash. 98117-2100 USA

DR. BPK CONTRACT PROCESS FLOW DIAGRAM  
C.O. 185 ST/HR FULLER-LOESCHE RAW MILL  
APPR. ASH GROVE CEMENT WEST, INC.  
DATE 05/90 SEATTLE, WASHINGTON, U.S.A.  
SCALE NONE DRAWING NUMBER REV. SHEET  
MICRO 135-90-4-24021 NO. 1 OF 5



